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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,931	11/28/2001	Hironori Yoshida	00449.00007	7282

22907 7590 11/17/2004

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EXAMINER	
PHAM, TUAN	
ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/994,931	YOSHIDA ET AL.	
	Examiner	Art Unit	
	TUAN A PHAM	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 November 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham et al. (U.S. Patent No.: 6,334,061, hereinafter, "Cunningham") in view of Bell, III et al. (U.S. Patent No.: 6,088,348, hereinafter, "Bell").

Regarding claims 1 and 7, Cunningham teaches a radio communication apparatus being connectable to a radio communication relay unit, (see figure 1) the apparatus comprising: a connection terminal configured to connect the radio

communication apparatus (see figure 1, portable telephone 10) to the radio communication relay unit (see figure 1, radio communication relay 4).

It should be noticed that Cunningham fails to clearly teach a first band pass filter configured to pass a first frequency band in a received radio frequency signal inputted from the connection terminal; a second band pass filter configured to pass a second frequency band in a received radio frequency signal inputted from the connection terminal; a first radio circuit configured to receive the radio frequency signal passed by the first band pass filter; a second radio circuit configured to receive the radio frequency signal passed by the second band pass filter; a controller configured to detect a connection with the radio communication relay unit; a first switch configured to switch connecting the first band pass filter to the first antenna or the connection terminal on the base of the controller detecting; and a second switch configured to switch connecting the second band pass filter to the second antenna or the connection terminal on the base of the controller detecting. However, Bell teaches such features (see figure 2, first band pass filter 201, second band pass filter 252, first radio circuit 214, second radio circuit 254, col.2, ln.29-44, see figure 6, first switch at antenna 610, band pass filter 612, band pass filter 615, second switch close to band pass 640, it is obvious the mobile phone should includes a controller for controlling all the element in the mobile phone) for a purpose of filtering out particular frequency.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of a first band pass filter configured to pass a first frequency band in a received radio frequency signal inputted from the

connection terminal; a second band pass filter configured to pass a second frequency band in a received radio frequency signal inputted from the connection terminal; a first radio circuit configured to receive the radio frequency signal passed by the first band pass filter; and a second radio circuit configured to receive the radio frequency signal passed by the second band pass filter, as taught by Bell, into view of Cunningham in order to save money and a device can supports multiple frequency band.

Regarding claim 2, Bell further teaches the radio communication apparatus wherein the first frequency band is for communicating with a radio communicating system and the second frequency band is for receiving a GPS signal from a GPS satellite (see figure 2, col.2, ln.39-54).

Regarding claims 3 and 12, Bell further teaches the radio communication apparatus further comprising, a first antenna configured to receive a radio frequency signal for communicating with a radio communicating system; a second antenna configured to receive a radio frequency signal for receive a GPS signal from a GPS satellite (see figure 2, antenna 210, antenna 250, col.2, ln.29-39).

Regarding claims 4 and 13, Bell further teaches the radio communication apparatus wherein the first radio circuit is capable to receive a plurality of radio frequency bands for communicating with a radio communicating system (see figure 2, col.2, ln.1-39).

Regarding claims 5-6 and 14-15, Cunningham further teaches the radio communication apparatus wherein the radio communicating system adapts a method of

time division multiple access and method of code division multiple access (see col.3, ln.28).

Regarding claim 8, Bell further teaches the radio communication apparatus wherein the first band pass filter is connected to the connection terminal through the first switch in case that the controller detects a connection with the radio communication relay unit (see figure 6, band pass filter 612, switch at antenna 610).

Regarding claim 9, Bell further teaches the radio communication apparatus wherein the first band pass filter is connected to the first antenna through the first switch in case that the controller detects no connection with the radio communication relay unit (see figure 6, band pass filter 612, switch at antenna 610, col.6, ln.49-67, the switch is switching to connect to band pass filter 612 for transmit cellular).

Regarding claim 10, Bell further teaches the radio communication apparatus wherein the second band pass filter is connected to the connection terminal through the second switch in case that the controller detects a connection with the radio communication relay unit (see figure 6, band pass filter 632, switch for GPS).

Regarding claim 11, Bell further teaches the radio communication apparatus wherein the second band pass filter is connected to second antenna through the second switch in case that the controller detects no connection with the radio communication relay unit (see figure 6, band pass filter 632, switch is switching to GPS channel, then that will support GPS system only).

3. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham et al. (U.S. Patent No.: 6,334,061, hereinafter, "Cunningham") in view of Bell, III et al. (U.S. Patent No.: 6,088,348, hereinafter, "Bell") as applied to claim 17 above, and further in view of King et al. (U.S. patent No.: 6,415,158, hereinafter, "King").

Regarding claim 16, Cunningham and Bell, in combination, fails to clearly teach a display unit configured to display information; wherein the display unit displays a message to inform that the controller detects the connection with radio communication relay unit. However, King teaches such features (see col.4, ln.46-67) for a purpose of displaying the information to the user.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of a display unit configured to display information; wherein the display unit displays a message to inform that the controller detects the connection with radio communication relay unit, as taught by King, into view of Cunningham and Bell in order to display information to the user.

Regarding claim 17, King further teaches the radio communication apparatus a display unit configured to display information; wherein the display unit displays a message to confirm that the controller detects the connection with radio communication relay unit (see col.4, ln.46-67).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Nakamura et al. (Pub. No. US 2001/0051537), Saitoh (U.S. Patent No. 6,055,422), Ishida (U.S. Patent No. 6,356,770), and Tendler (Pub. No. U.S. 2003/0109244) are not applied into this Office Action; they are also called to Applicants attention. They may be used in future Office Action(s). These references are also concerned for supporting the system and method for an external adapter for a portable cellular phone.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (703) 305-4987. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (703) 305-4708 and

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2643
November 7, 2004
Examiner

Tuan Pham

CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600